

## SAP PM - PP Integration Planned Maintenance & Capacity Planning



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Active Contributor

2021 Oct 06 8:08 AM



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Hi,

Capacity planning is essential part of production planning. And for that we need to know availability of our work centers. Getting MRP results related to those work centers gives you idea about load of work you need to plan but we also need to pay attention to planned maintenances of those work centers. In order to make a realistic plan.

Thankfully SAP PM and PP can be linked organically to reflect planned maintenance orders to PP capacity plans. And SAP PP can feed SAP PM as well, as mentioned below.

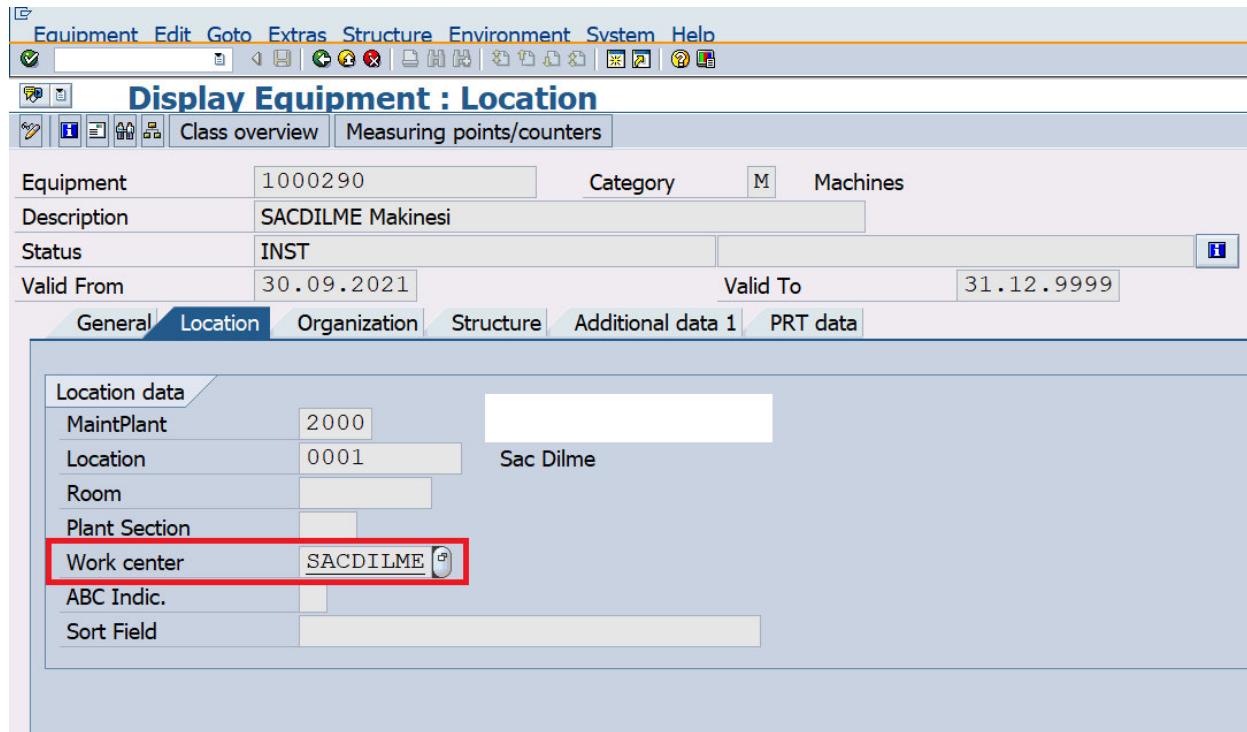
[SAP PM and PP link can be created on two areas.](#)

First, SAP PM Equipment/PRT(Production Resource / Tool(**IE01,IE25**)) & PP operations(**CA01,CA02**) can be linked to create measurement documents for measuring points of PRT equipment. By using measuring point you can create plans(**IP41**) and automatically schedule maintenance orders(**IP30**). For that [please check this SAP Blog Post](#) by Sandeep Praharaj.

And the second, which is also reason why I write this blog post, to make, SAP PM Maintenance to appear on **CM21/CM21** PP capacity planning. You need those following settings, if you want PM Order to be considered by capacity planning.

Please follow those steps below;

1- **IE01** -> Create an equipment and fill workcenter information. Workcenter should have capacity planning data "Relevant to Finite Scheduling" must be checked.



Check Capacity settings of Workcenter - Capacities Tab(Choose Machine) -> Capacity "Relevant to Finite Scheduling" setting.

Work center Edit Goto Extras System Help

## Display Work Center: Capacity Overview

HR assignment Hierarchy

Plant 2000  
Work center SACDILME

Basic Data Default Values Capacities Scheduling Costing Technology

**Overview**

Capacity category	Value	Description
001	Machine	
Pooled capacity		
Setup Formula	ZKMHAZ	Prod: Setup rqmts
Processing Formula	ZKMMAK	Prod.: Machine rqm
Teardown Formula		
Other Formula		
Distribution		
Int. dist. key		
Capacity category	002	Person
Pooled capacity		
Setup Formula	ZKIHAZ	Prod: Setup rqmts
Processing Formula	ZKIISG	Prod.: Machine rqm
Teardown Formula		
Other Formula		
Distribution		
Int. dist. key		

Control CapacityReduction

Formula-Related  
Formula-Related  
Formula-Related

Control CapacityReduction

Formula-Related  
Formula-Related  
Formula-Related

Capacity Form. Formula Formula constnts ActCapReqmnts

The screenshot shows the SAP PM - PP Integration Planned Maintenance & Capacity screen. The title bar reads "Display Work Center Capacity: Header". The top navigation bar includes "Work center", "Edit", "Goto", "Extras", "System", and "Help". Below the title bar, there are several tabs: "Intervals and Shifts", "Intervals", "Available Capacity Profile", "Reference Available Capacity", and "Short Texts". The main content area is divided into sections:

- General data:** Capacity Responsible (001), Pooled capacity (checkbox), Grouping (01), SAP example (Turkey).
- Available capacity:** Factory Calendar (TR), Active Version (1), Capacity Base Unit (MIN), Length of breaks (00:00:00), Operating time (20,40), Capacity Utilization (85%), No. Ind. Capacities (1), Capacity (1.224,00 MIN).
- Standard available capacity:** Start Time (00:00:00), End Time (24:00:00), Capacity Utilization (85%), No. Ind. Capacities (1), Capacity (1.224,00 MIN).
- Planning details:** Relevant to Finite Scheduling (checkbox highlighted with a red box), Overload (0 %), Can be used by several operations (checkbox), Long-term planning (checkbox).

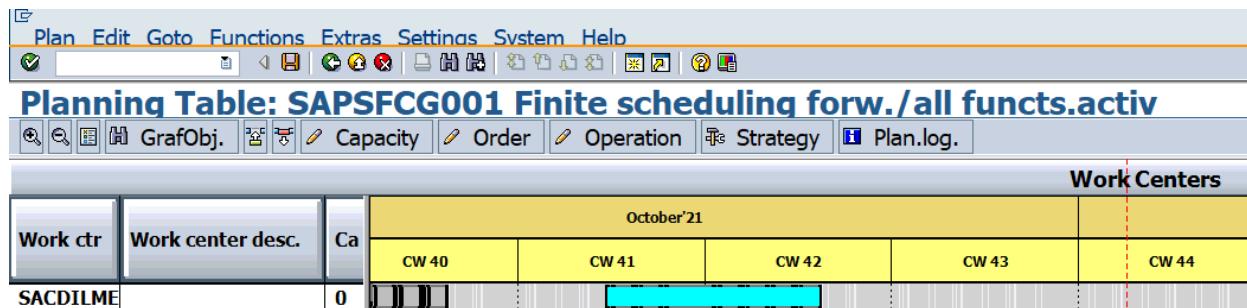
2- IW31 -> Create Maintenance Order for equipment and set System Condition to "0"

The screenshot shows the SAP PM - PP Integration Planned Maintenance & Capacity screen. The title bar reads "Display Maintenance order 4000564: Central Header". The header section includes fields for Order (PM01 4000564), Sys.Status (REL MANC NMAT PRC SETC), and tabs for HeaderData, Operations, Components, Costs, Partner, Objects, Additional Data, Location, Planning, and Control. The HeaderData tab is selected. A red box highlights the Dates section, which contains Bsc start (14.10.2021) and Basic fin. (22.10.2021). Another red box highlights the Reference object section, where Equipment (1000290) is listed as SACDILME Makinesi. A third red box highlights the SystCond. field (0 not in operatio).

Please pay attention to;

- Maintenance order must be released
- Equipment work center is not related to order maintenance workcenter.
- Maintenance Order duration is considered in CM21 / CM25.

And now, you can check the capacity in **CM21** or **CM25** and you will see the maintenance order.



So, with those small changes on our equipment and maintenance order, now we can see true capacity of our work center. In that way, Instead of making plan for whole duration, although whole duration is now available in reality, now we can make more realistic capacity planning with consideration of maintenance orders for our work centers.

Feel free to ask questions or if you have any feed back to provide, comment below. Please share if you think that can be useful.

Hope that helps.

#### Tags:

[sap capacity planning](#) [sap pm](#) [SAP Pm & PP Link](#) [sap pp](#)

#### Comments



maurojara3 Participant

2021 Oct 07

3:17 PM

Hi Beyhan, It's a very good explanation!



VigneshV Participant

2021 Nov 03

7:47 AM

Great one beyhan.meyrali

Clearly articulated.

Major challenge is the PP Workcentre integration with PM Workcentre - clearly explained in above.

Vignesh V



JiePeng Explorer

2022 Jul 13  
7:04 PM

I try it in system follow , but I can't see maintance order in CM25, what's I need to do if want show in CM25?



deepak\_d Explorer

2022 Dec 21  
12:15 PM

Neat and precise explanation Beyhan.

But there is one point, I feel, should have been covered here - Dont we have to set the Indicator for 'Reservation by PM" against the system condition '0' in the configuration?

Please correct me if I am wrong:)

Regards

Deepak Doddagoudar



beyhan\_meyrali Active Contributor

2022 Dec 22  
5:43 AM

Hi Deepak,

Thanks for the comment. 😊 I am here to correct you.

System condition 0 is, by default, set to Reservation by PM.Unless somebody changed it.

The screenshot shows a SAP Fiori application interface titled "Change View 'Operating Condition': Overview". The top navigation bar includes "Table View", "Edit", "Goto", "Selection", "Utilities", "System", and "Help". Below the title, there are several icons for actions like New Entries, Copy, Paste, and Delete. The main area displays a table with three columns: "SystemCondition", "Operating condition", and "Reservation by PM". The table has four rows. The first row (SystemCondition 0) has "not in operation" in the Operating condition column and a checked checkbox in the Reservation by PM column. The second row (SystemCondition 1) has "in operation" in the Operating condition column and an unchecked checkbox in the Reservation by PM column. The third and fourth rows are empty.

SystemCondition	Operating condition	Reservation by PM
0	not in operation	<input checked="" type="checkbox"/>
1	in operation	<input type="checkbox"/>

Regards



deepak\_d Explorer

2022 Dec 22  
6:45 AM

Hello there Beyhan:),

Ah ha... THank you for correcting me.

Now I see why it is checked in my Client system.

Regards

Deepak



former\_member811422 Explorer

2023 Jun 24  
2:59 PM

Hi Beyhan,

This is a very interesting topic, and great insights provided by you.

I have a quick query, from plant maintenance perspective, can we perform capacity levelling utilizing FIORI apps?

As more clients are leaning, to only using Fiori apps, the functionalities of CM21 or CM25 which were used for capacity levelling by Plant maintenance users are no more available from Fiori perspective.

I am unable to find a suitable replacement from Fiori apps perspective.

The apps Manage work center capacity (F3289), capacity scheduling table, and capacity scheduling board cannot be used by PM, as we have to set 'Area of Responsibility' initially, which from plant maintenance perspective cannot be assigned.

Please provide your comments on the same. Or any suggestions to tackle the situation.

Regards

Venu

A

anandjain Discoverer

2023 Sep 23  
9:50 AM

Hi Beyhan,

It was a good explanation,

Can you share me process where I can plan PRT as work center, and make capacity Planning accordingly to it also,

Case is:-

1. Let say I have one WC with Setup for 15 min and Process of 45 Min,
2. At the same WC we are using a PRT which will be used for 65 Min.( 5 min extra for cleaning and indexing)
3. Also this PRT cannot be used more than 10 time, so life is max 650 minute of operation.
4. Also this PRT need to be procured.

Now I want to plan and schedule the work

Can you help me how to config this scenario.

Thanks,

Anand Jain

L

CesarSalazar Newcomer

2024 Jun 21

11:02 PM

Hello dear experts, thanks a lot for the well explanation. I have a doubt, if we have the maintenance order reflected in the CM21/25 capacity board, does PP team can be able to schedule a Process/Production order in the same date as the maintenance order or the maintenance order will prevent this?

Thanks in advance.

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